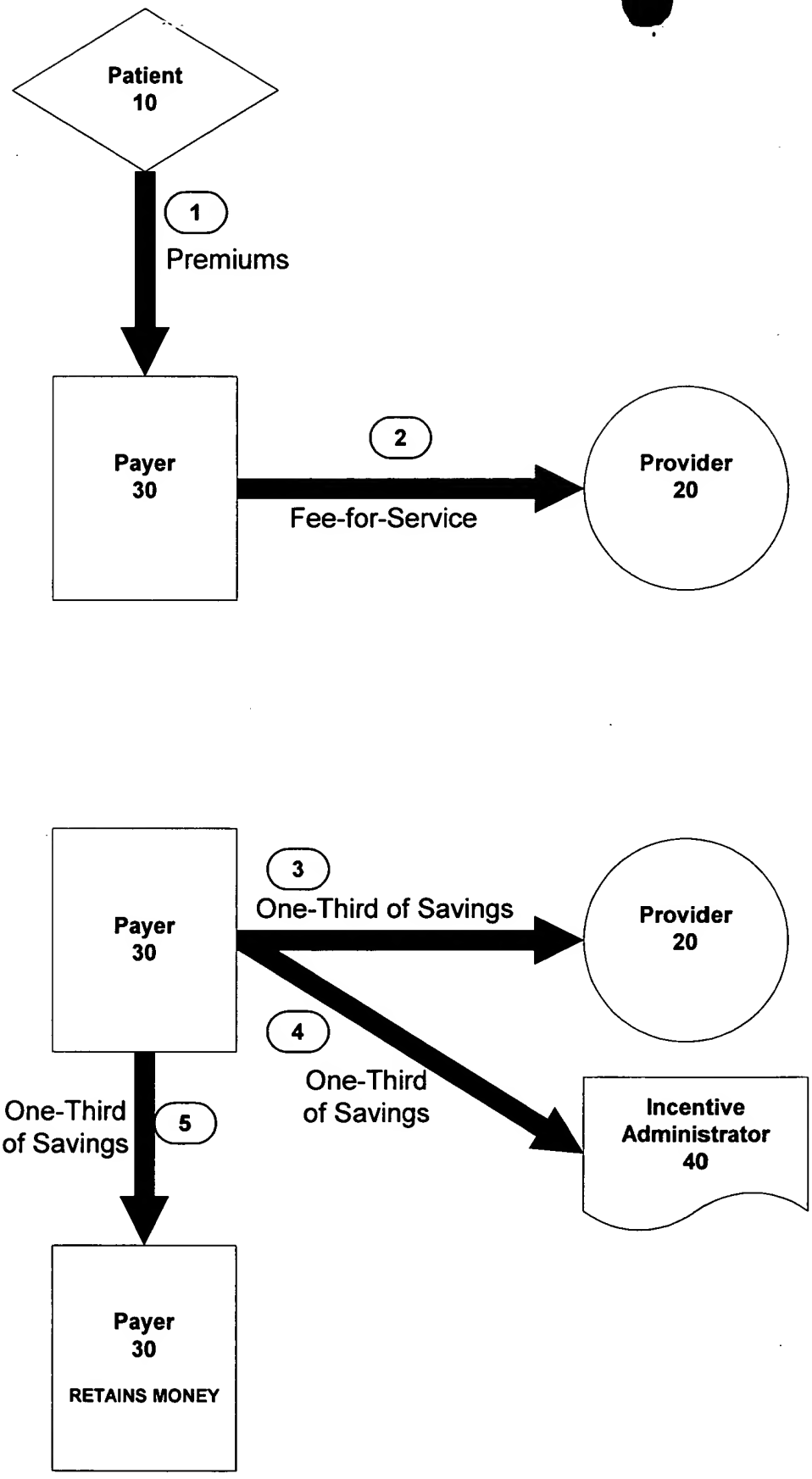
Patient
10
1
Premiums
Payer
30
2
Fee-for-Service
Provider
20
Payer
30
3
One-Third of Savings
Provider
20
4
One-Third
of Savings
One-Third
of Savings
5
Incentive
Administrator
40
Payer
30
RETAINS MONEY

Figure 1

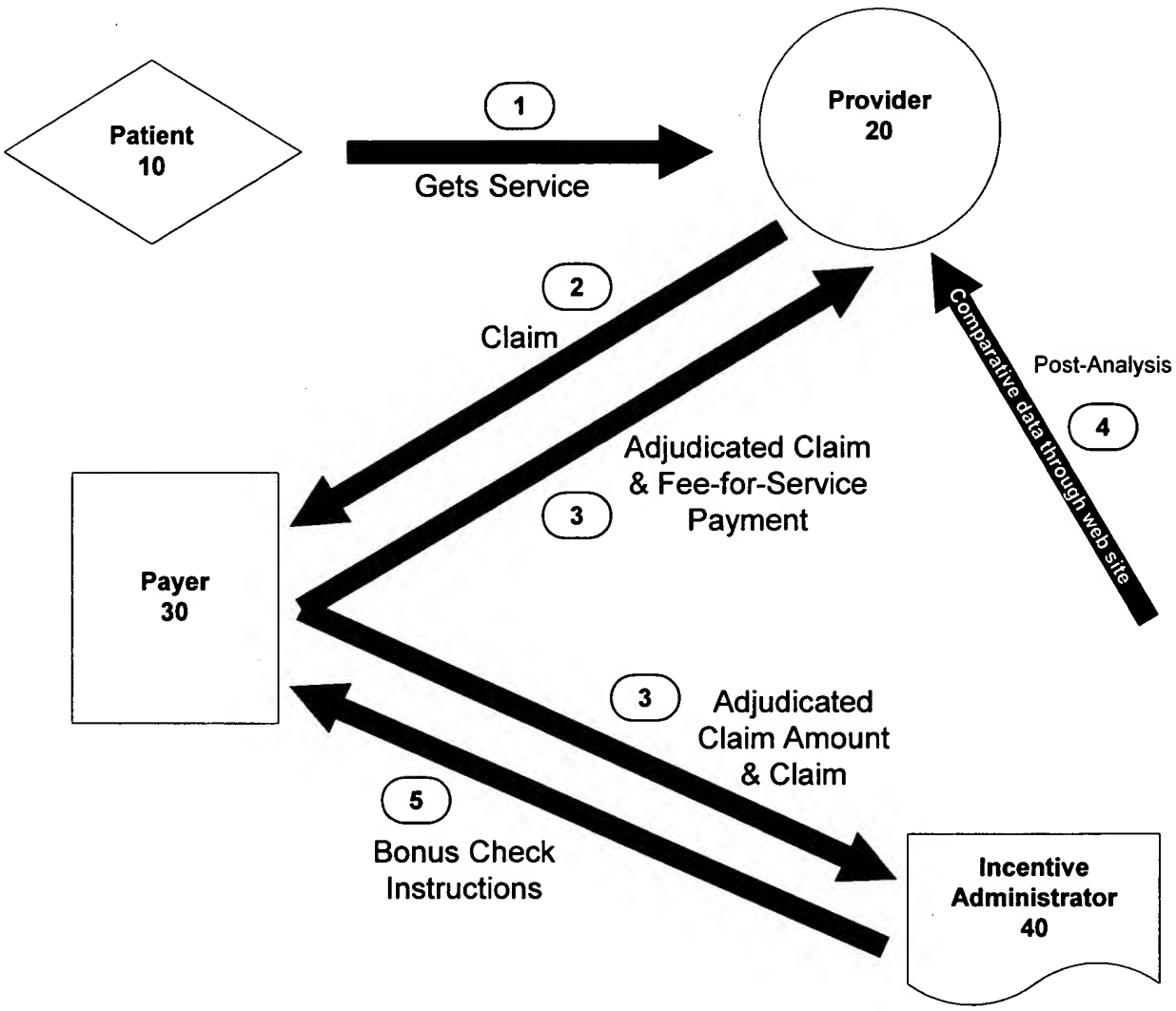
Patient
10
1
Gets Service
Provider
20
2
Claim
Adjudicated Claim
& Fee-for-Service
Payment
3
Post-Analysis
4
Comparative data through web site
Payer
30
3
Adjudicated
Claim Amount
& Claim
5
Bonus Check
Instructions
Incentive
Administrator
40

Figure 2

Name	*Size*	*Sample*	*Description*
Family ID	30	368743816	With Member ID, forms a unique identifier for each patient in the plan
Member ID	2	01	With Family ID, forms a unique identifier for each patient in the plan
Patient Sex	1	M	Code to indicate gender
Patient Age	3	34	Age of patient
Amount Paid	11	897.34	Adjudicated amount, the amount the payor pays to the provider, which excludes copays and deductibles
CPT4 Code	5	21454	A industry standard code which designates the type pf procedure or action provided
First DX Code	6	830	An industry standard (ICD-9) code which designates the primary diagnosis
Second DX Code	6	8481	An industry standard (ICD-9) code which designates an additional diagnosis, if it exists
Third DX Code	6		An industry standard (ICD-9) code which designates an additional diagnosis, if it exists
Fourth DX Code	6		An industry standard (ICD-9) code which designates an additional diagnosis, if it exists
First Date Of Service	8	6/26/1999	The date the service was provided (or the first date of a date range)
Last Date Of Service	8		The last date of a date range when service was provided, or null
Type Of Service	10	A	A code which indicates the type of charge, if the CPT4 code is not available
Provider ID	20	18772554	A unique identifier for a provider
NDC Code	11	45044964	An industry standard code which identifies the drug used

Figure 3A

		Added by Gr uper	
Nam	***Size***	***Sampl***	***Descripti n***
ETG Assignment	4	723	A code indicating the ETG Category assigned to this claim, which classifies the episode type
Episode Number	10	98614	A sequential counter used to identify distinct episode instances
Episode Cluster	3	3	A subset of an episode instance
Episode Type Flag	1	1	A code indicating the confidence in the accuracy of the episode instance
Record Type Flag	1	M	A code indicating the category of the expense
Cluster Provider ID	20	18772554	The provider who is responsible for the claim which is the basic claim for this cluster.

FIG. 3B1

Added by Incentive Administrator				
Nam	***Siz***	***Sample***	***Description***	***Entity***
EPG Assignment	5	1982	A code indicating the EPG Category assigned to this claim, which classifies the episode type	Episode Instance
EPG Number	15	928776	A sequential counter used to identify distinct episode instances	Claim
Outlier	1	0	A flag to indicate that the episode is an outlier	Episode Instance
Do not Pay Incentive	1	0	A flag to indicate that the episode should not have an incentive paid	Episode Instance
Responsible Physician	20	18772554	The provider who is responsible for the EPG	Episode Instance
Baseline	11	2105	Default expected cost of the episode, used as a normative measure of cost	Episode Category
Adjusted Baseline	11	1015	The baseline value for the episode instance, adjusted for comorbidities or other reasons	Episode Instance
Savings	11	101	The savings achieved for this episode instance - if negative, indicates that the total cost was greater than the baseline	Episode Instance
Referring Physician	20	20715432	The physician who referred the patient, if any	Episode Instance
Default Physician	20	10217824	The default physician to use for the patient if no Responsible Physician can be determined	Patient
Floor Value	11	450	The minimum cost an episode instance is expected to cost	Episode Category
Ceiling Value	11	2200	The maximum cost an episode is expected to cost	Episode Category
Total Actual Cost	11	914	The total payments made for the claims in the episode	Episode Instance
Serial Episode Indicator	1	0	Indicates possible serial episode gaming validation	Episode Instance
Do not Check for Serial Episode Indicator	1	0	Indicates that this episode instance should not be checked for a serial episode gaming validation	Episode Instance
Do not Check for Floor Indicator	1	0	Indicates that this episode instance should not be checked for a Below Floor validation	Episode Instance
Below Floor Indicator	1	0	Indicates possible below floor gaming validation	Episode Instance
Possible Upcode Indicator	1	1	Indicates possible upcoding gaming validation	Episode Instance
Prorata factor	5	0.85	Percentage of total treatment (and expense) to be allocated to this episode where the patient enters or leaves the plan while an episode is in progress. Most episodes will be 1	Episode Instance
Comorbidity Factor	5	1.25	Ratio used to adjust a baseline for the presence of a comorbidity condition for the patient	Cormorbidity Instance

FIG. 3B2

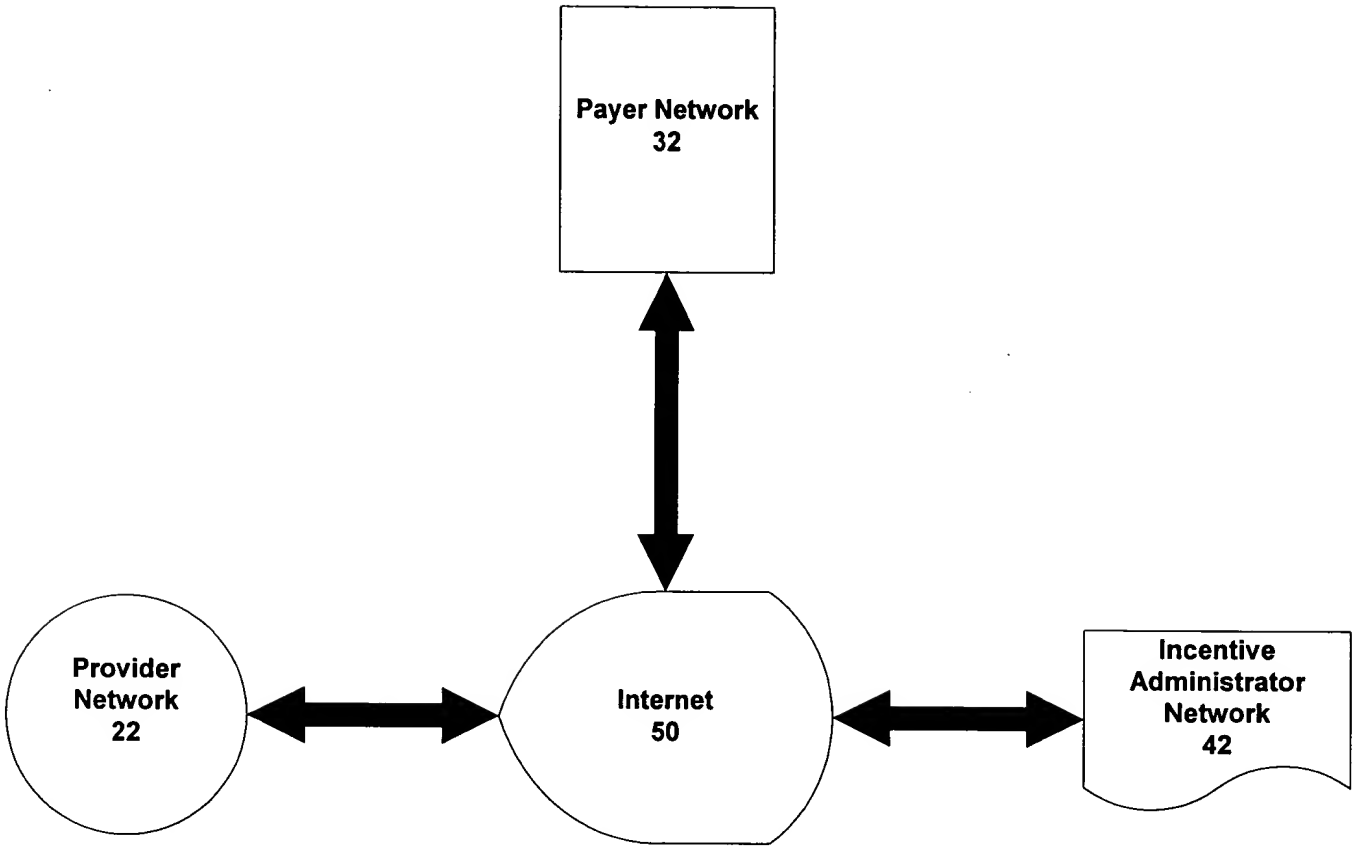
Payer Network
32
Provider
Network
22
Internet
50
Incentive
Administrator
Network
42

Figure 4

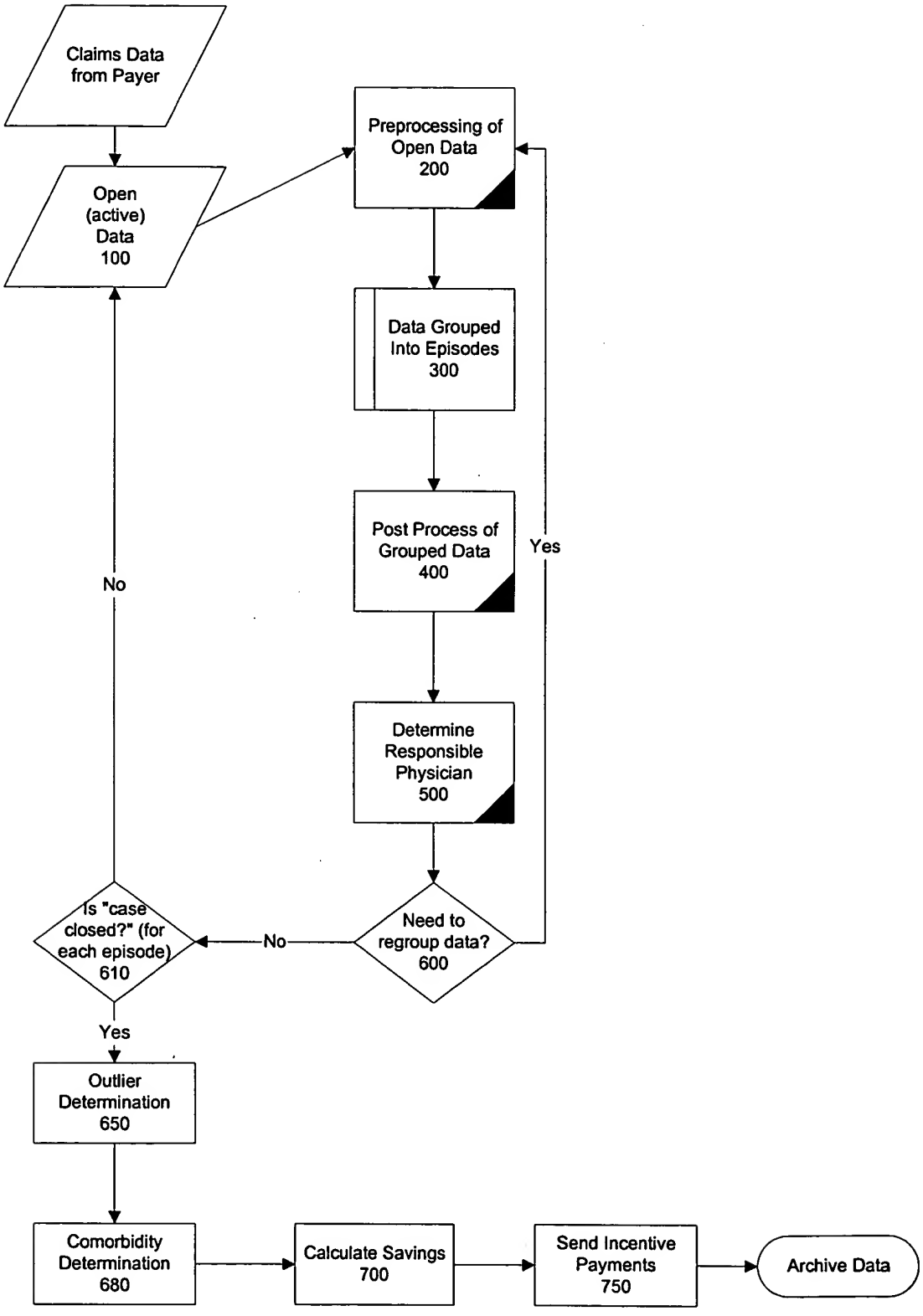
Claims Data from Payer
Open (active) Data 100
Preprocessing of Open Data 200
Data Grouped Into Episodes 300
Post Process of Grouped Data 400
Determine Responsible Physician 500
Need to regroup data? 600
Yes
No
Is "case closed?" (for each episode) 610
No
Yes
Outlier Determination 650
Comorbidity Determination 680
Calculate Savings 700
Send Incentive Payments 750
Archive Data

Figure 5

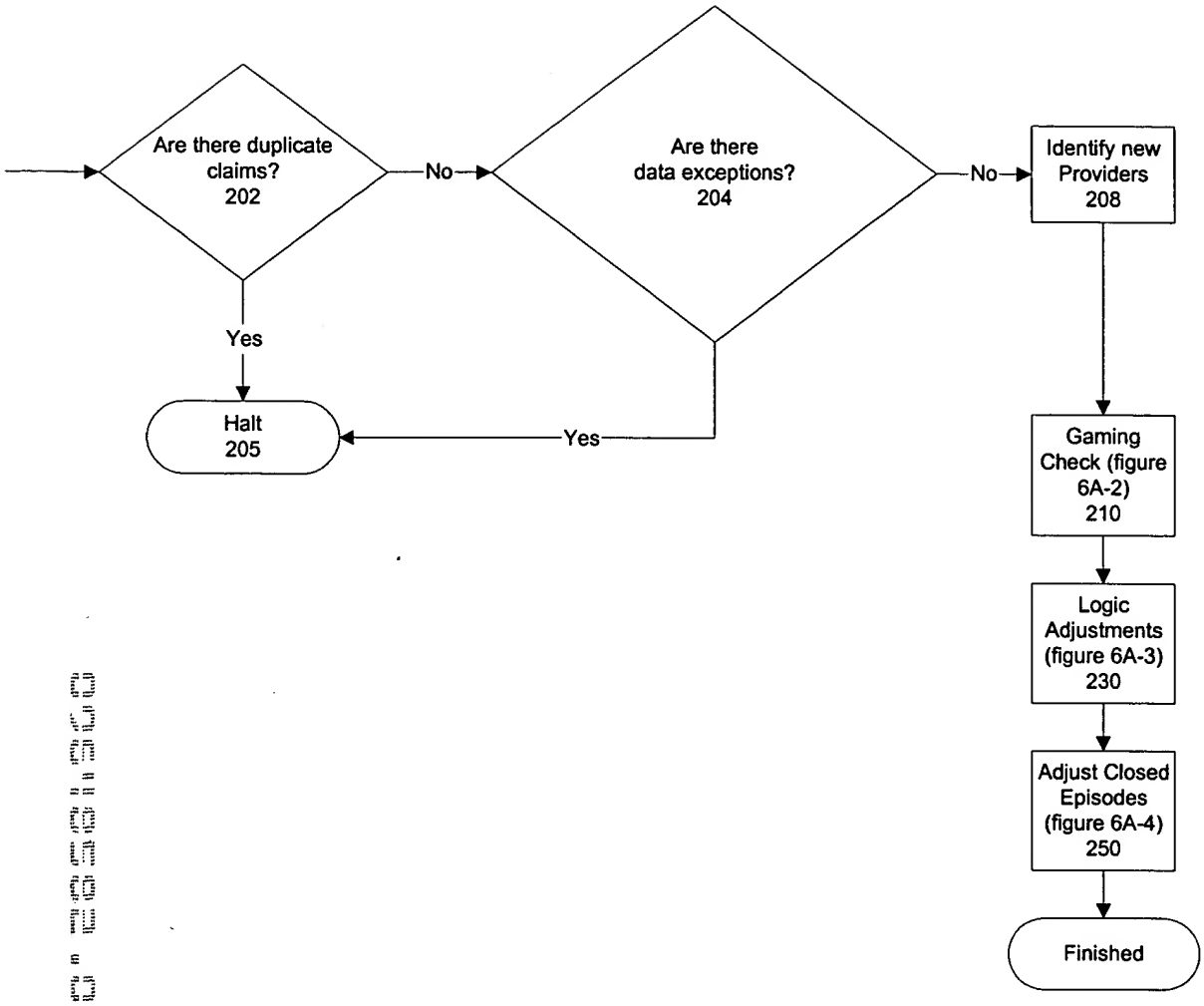
Are there duplicate claims? 202
No
Are there data exceptions? 204
No
Identify new Providers 208
Yes
Halt 205
Yes
Gaming Check (figure 6A-2) 210
Logic Adjustments (figure 6A-3) 230
Adjust Closed Episodes (figure 6A-4) 250
Finished

Figure 6A-1

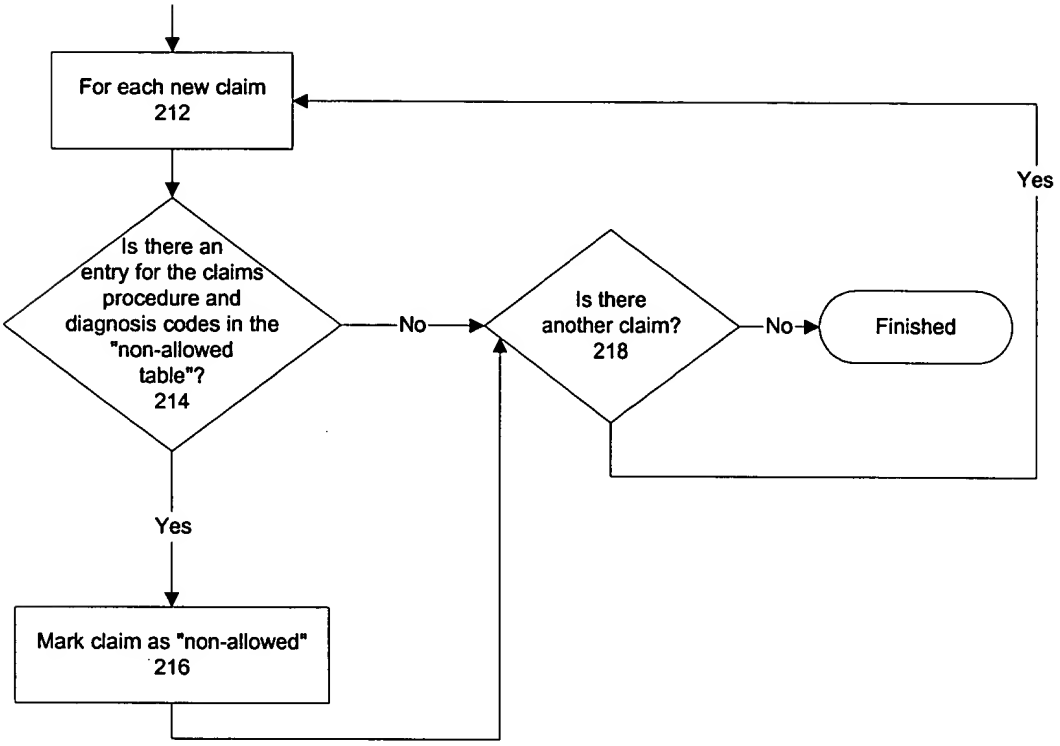
For each new claim
212
Is there an entry for the claims procedure and diagnosis codes in the "non-allowed table"?
214
No
Is there another claim?
218
No
Finished
Yes
Yes
Mark claim as "non-allowed"
216

Figure 6A-2

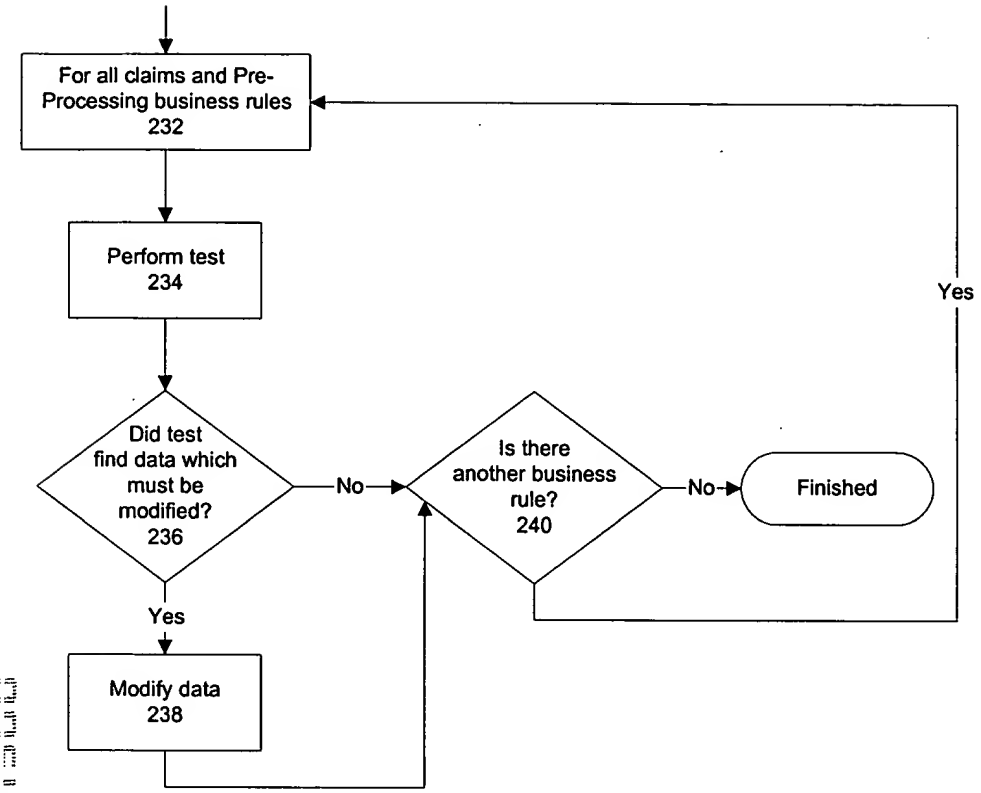
For all claims and Pre-Processing business rules 232
Perform test 234
Did test find data which must be modified? 236
No
Is there another business rule? 240
No
Finished
Yes
Yes
Modify data 238

Figure 6A-3

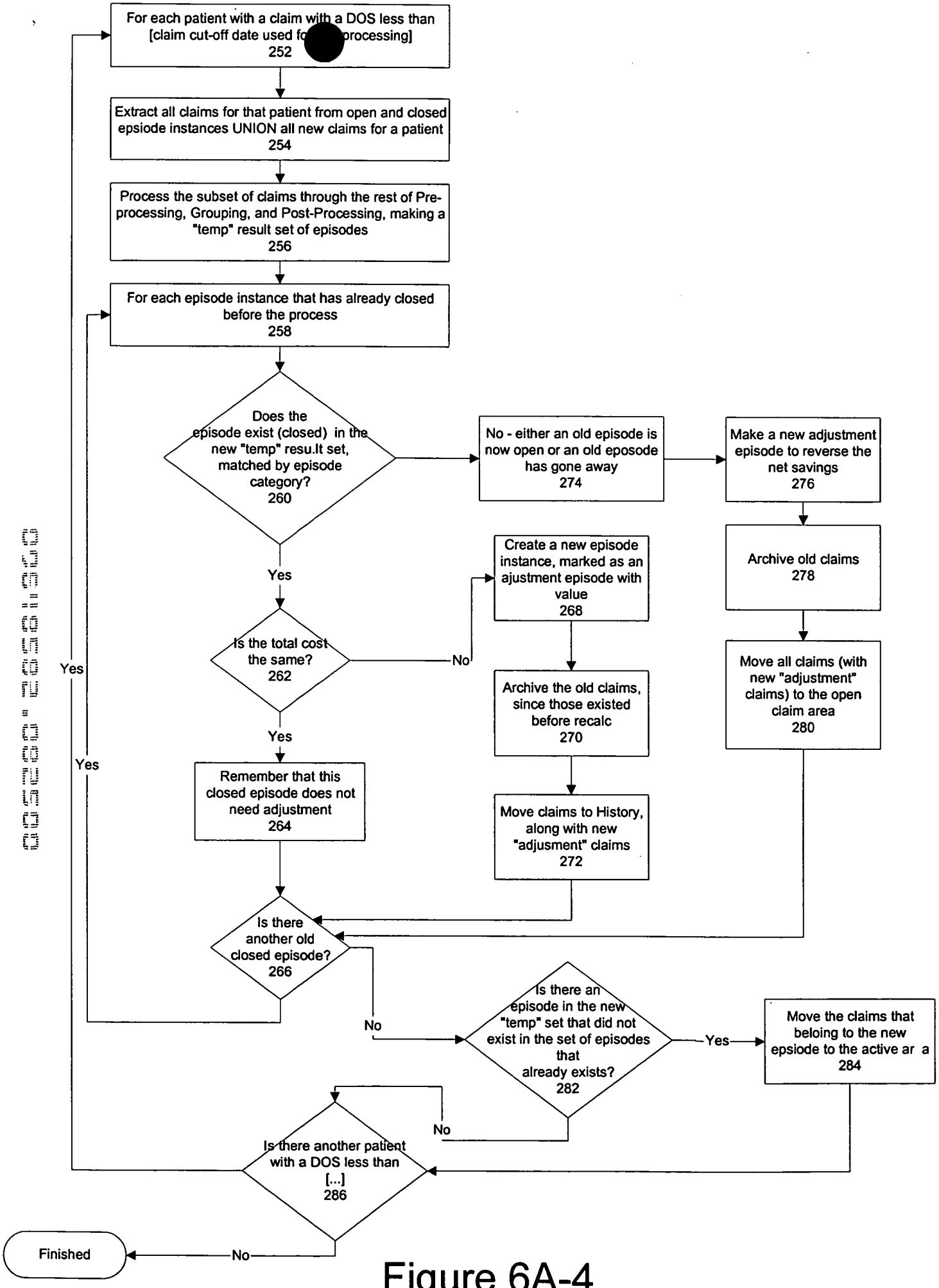
For each patient with a claim with a DOS less than [claim cut-off date used fo processing]
252
Extract all claims for that patient from open and closed epsiode instances UNION all new claims for a patient
254
Process the subset of claims through the rest of Pre-processing, Grouping, and Post-Processing, making a "temp" result set of episodes
256
For each episode instance that has already closed before the process
258
Does the episode exist (closed) in the new "temp" resu.lt set, matched by episode category?
260
No - either an old episode is now open or an old eposode has gone away
274
Make a new adjustment episode to reverse the net savings
276
Archive old claims
278
Move all claims (with new "adjustment" claims) to the open claim area
280
Yes
Create a new episode instance, marked as an ajustment episode with value
268
Is the total cost the same?
262
No
Archive the old claims, since those existed before recalc
270
Move claims to History, along with new "adjusment" claims
272
Yes
Remember that this closed episode does not need adjustment
264
Is there another old closed episode?
266
Yes
Yes
No
Is there an episode in the new "temp" set that did not exist in the set of episodes that already exists?
282
Yes
Move the claims that beloing to the new epsiode to the active ar a
284
No
Is there another patient with a DOS less than [...]
286
Yes
No
Finished

Figure 6A-4

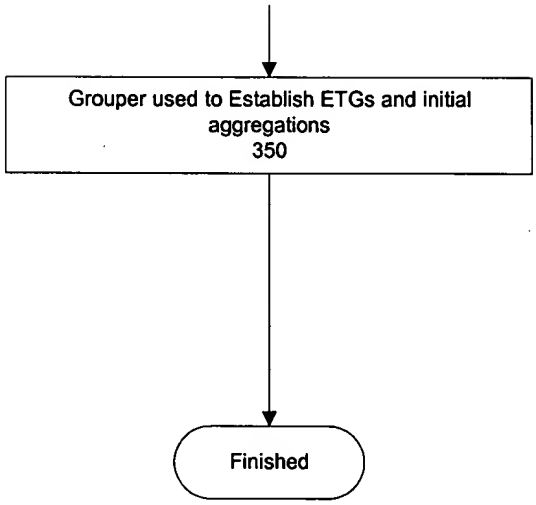
Grouper used to Establish ETGs and initial aggregations
350
Finished

Figure 7

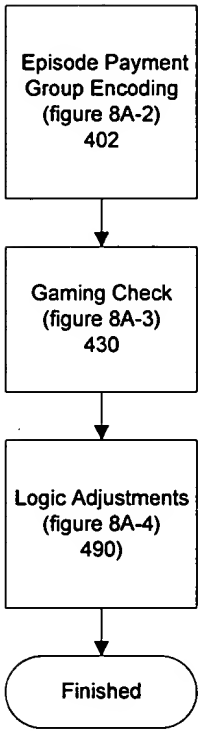
Episode Payment Group Encoding (figure 8A-2) 402
Gaming Check (figure 8A-3) 430
Logic Adjustments (figure 8A-4) 490)
Finished

Figure 8A-1

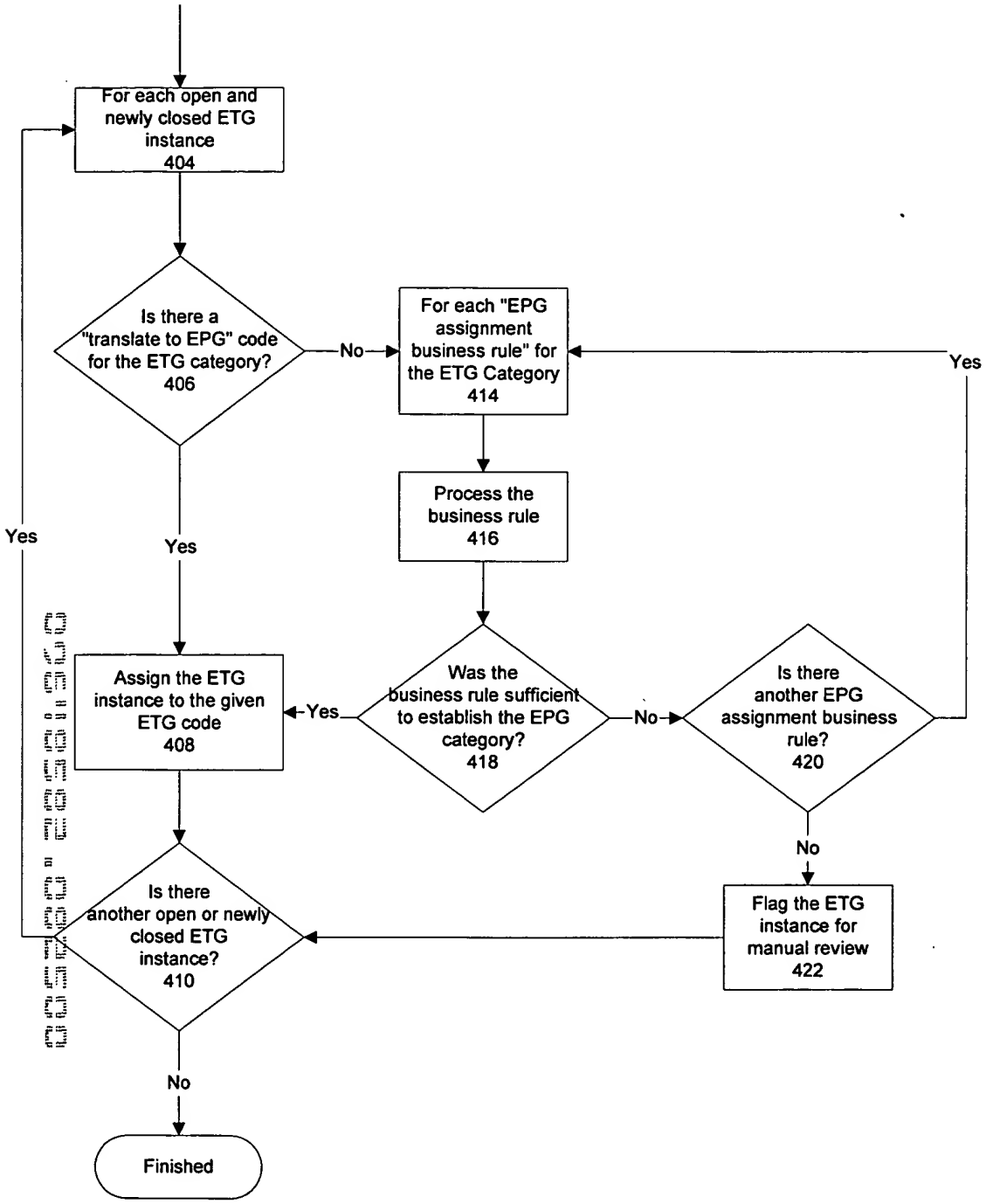
For each open and newly closed ETG instance 404
Is there a "translate to EPG" code for the ETG category? 406
No
For each "EPG assignment business rule" for the ETG Category 414
Yes
Process the business rule 416
Yes
Yes
Assign the ETG instance to the given ETG code 408
Was the business rule sufficient to establish the EPG category? 418
Yes
No
Is there another EPG assignment business rule? 420
No
Flag the ETG instance for manual review 422
Is there another open or newly closed ETG instance? 410
Yes
No
Finished

Figure 8A-2

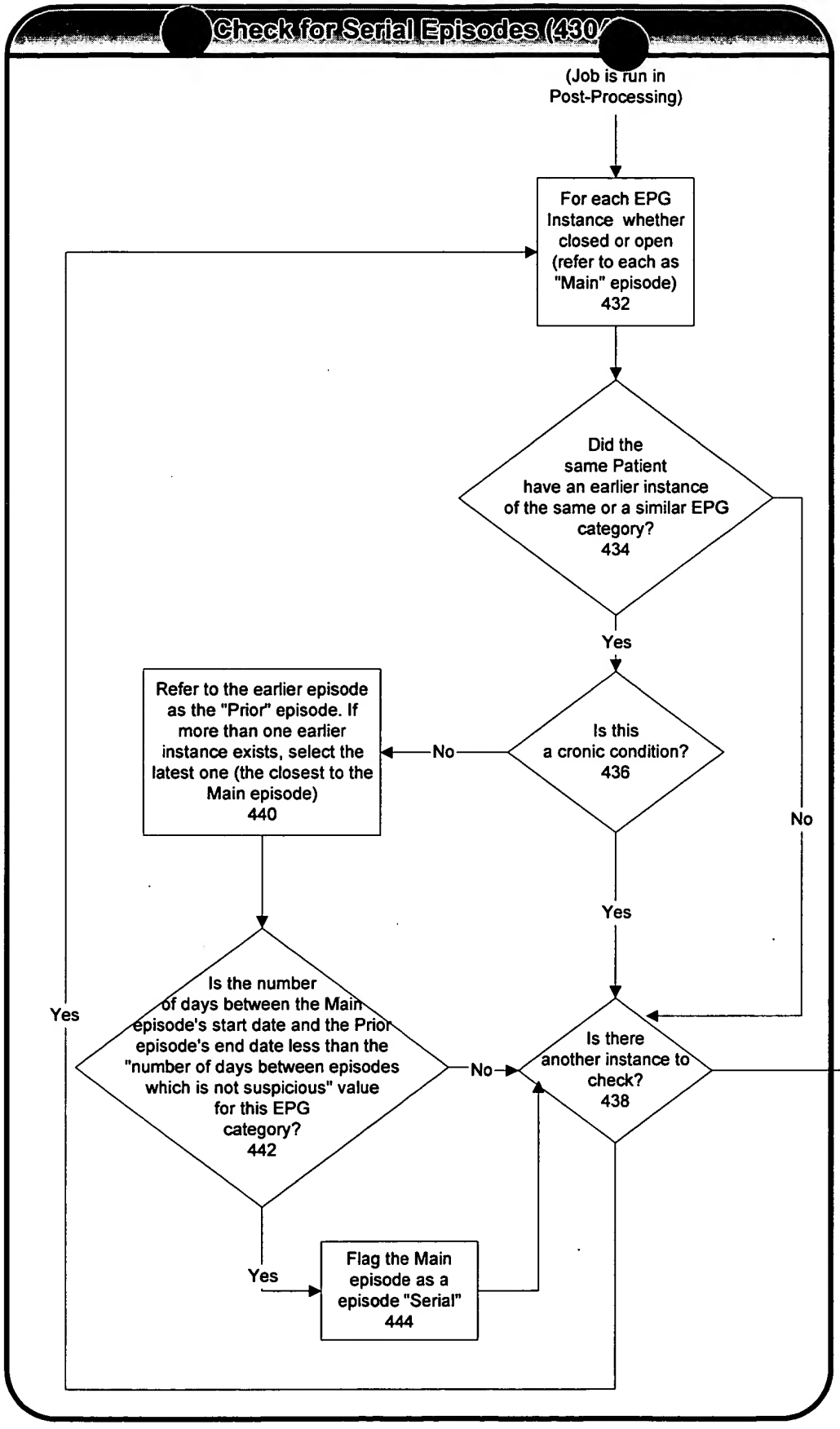

Figure 8A-3 (1 of 4)

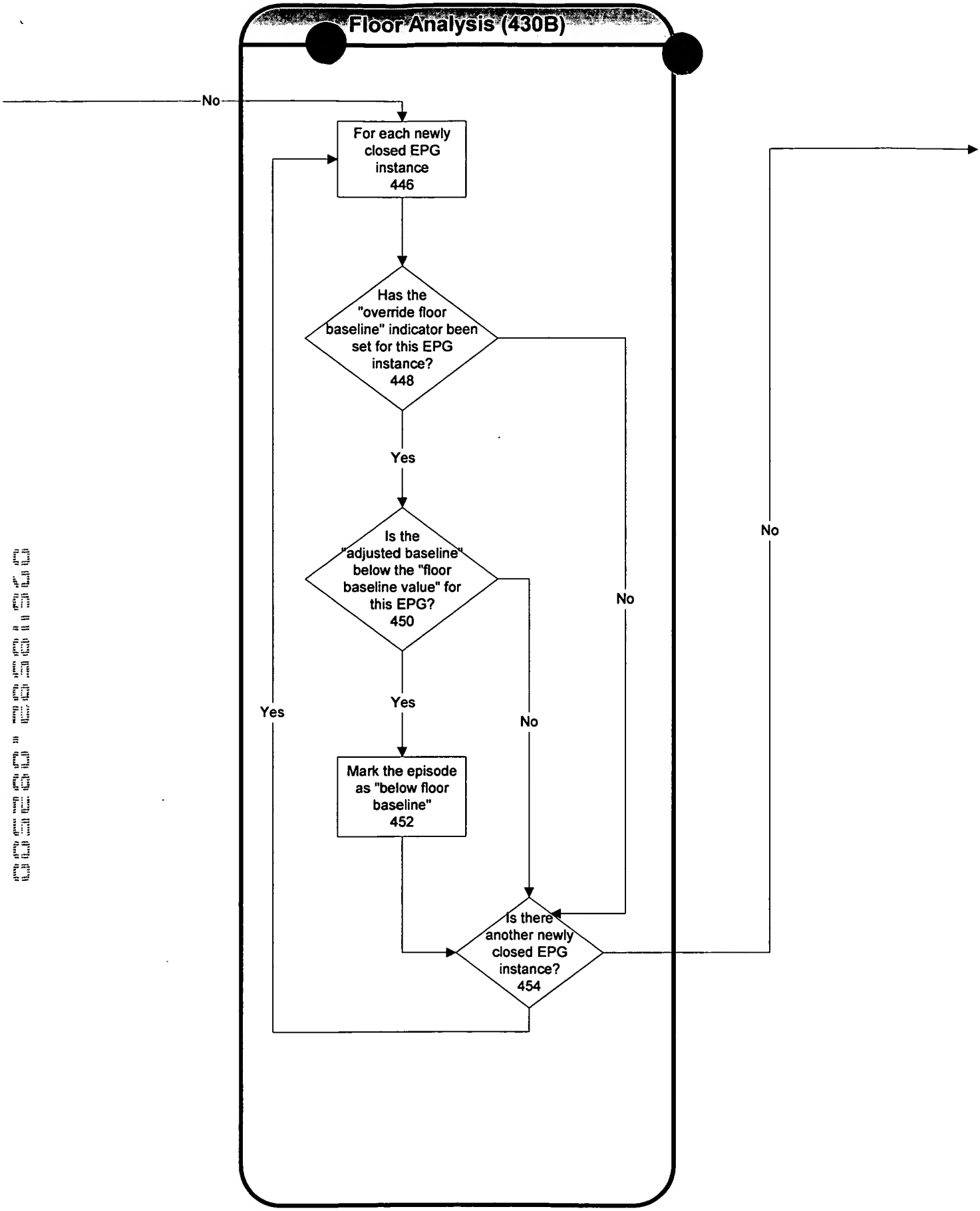

Figure 8A-3 (2 of 4)

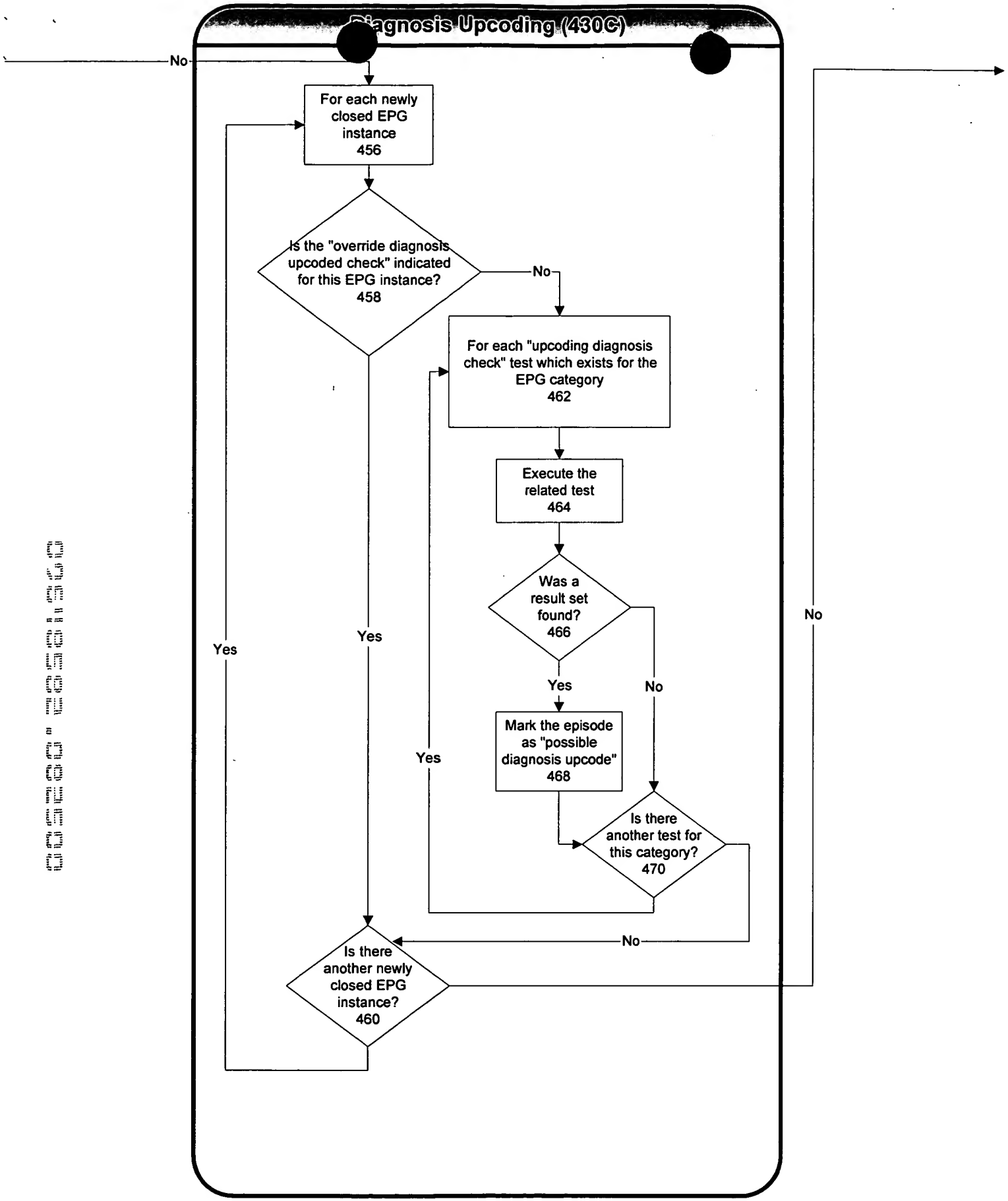

Figure 8A-3 (3 of 4)

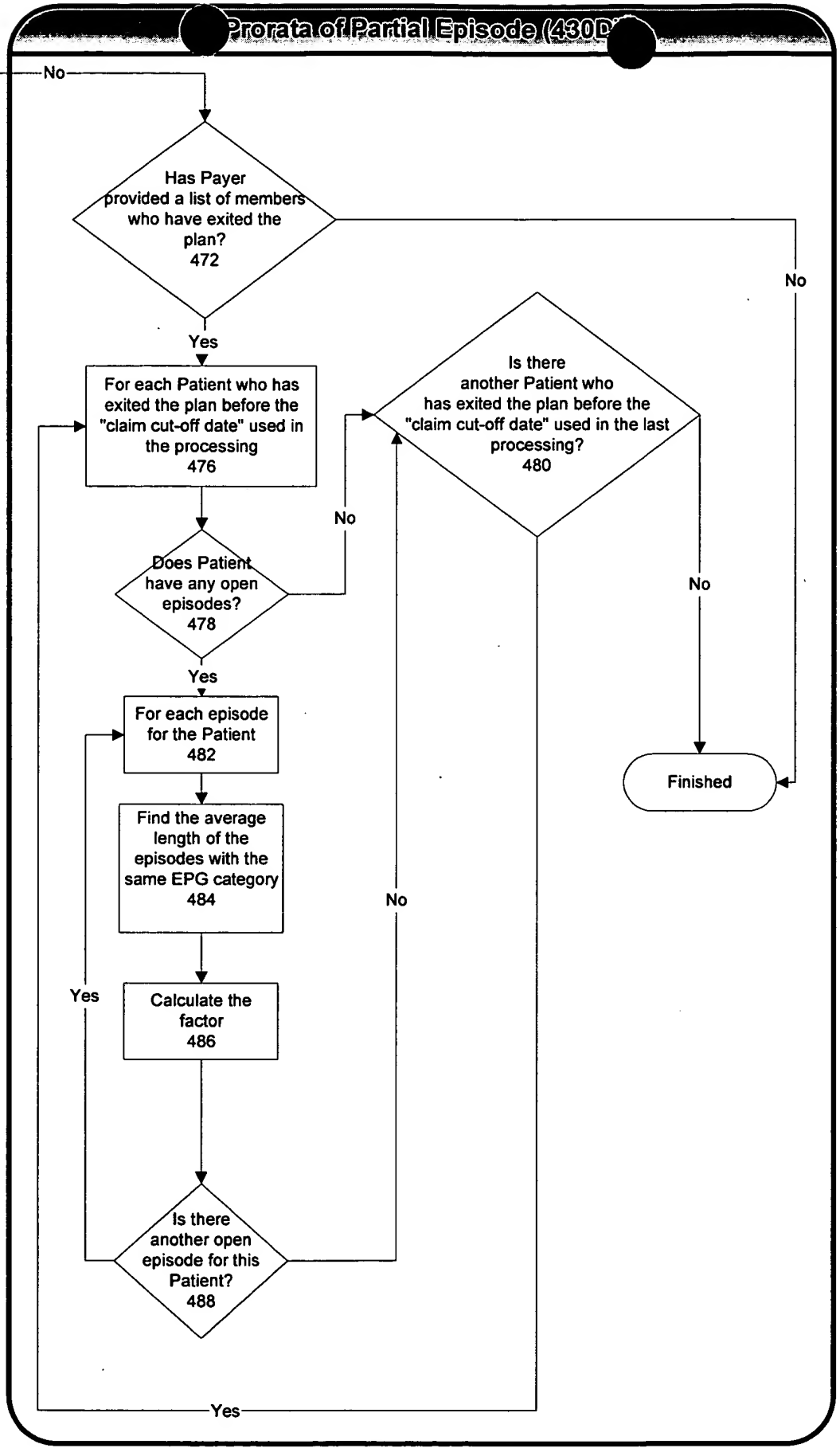

Figure 8A-3 (4 of 4)

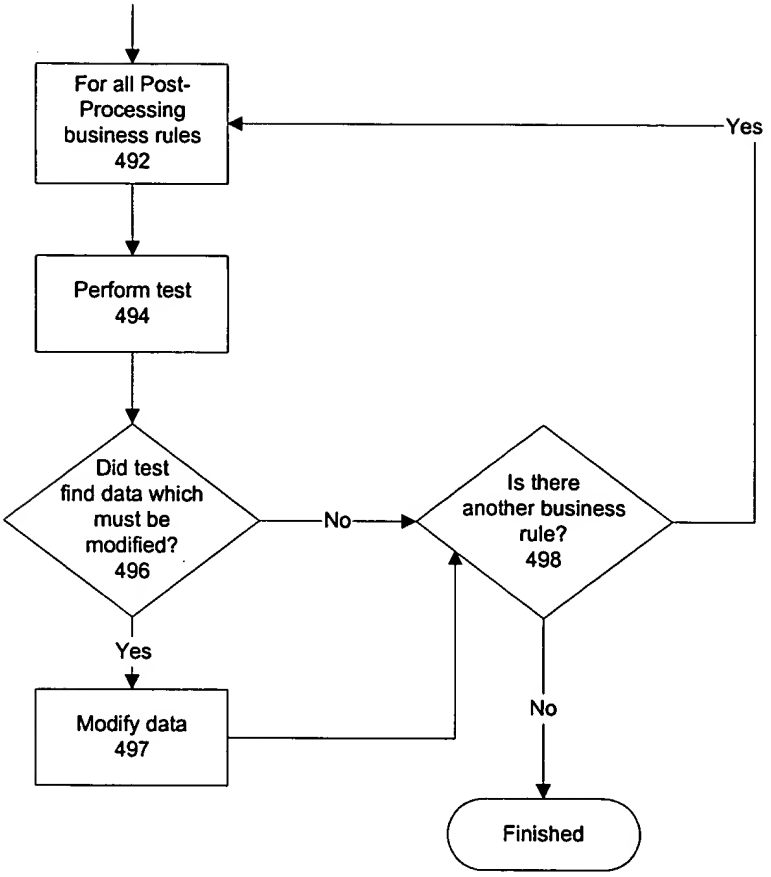
For all Post-Processing business rules 492
Yes
Perform test 494
Did test find data which must be modified? 496
No
Is there another business rule? 498
Yes
Modify data 497
No
Finished

Figure 8A-4

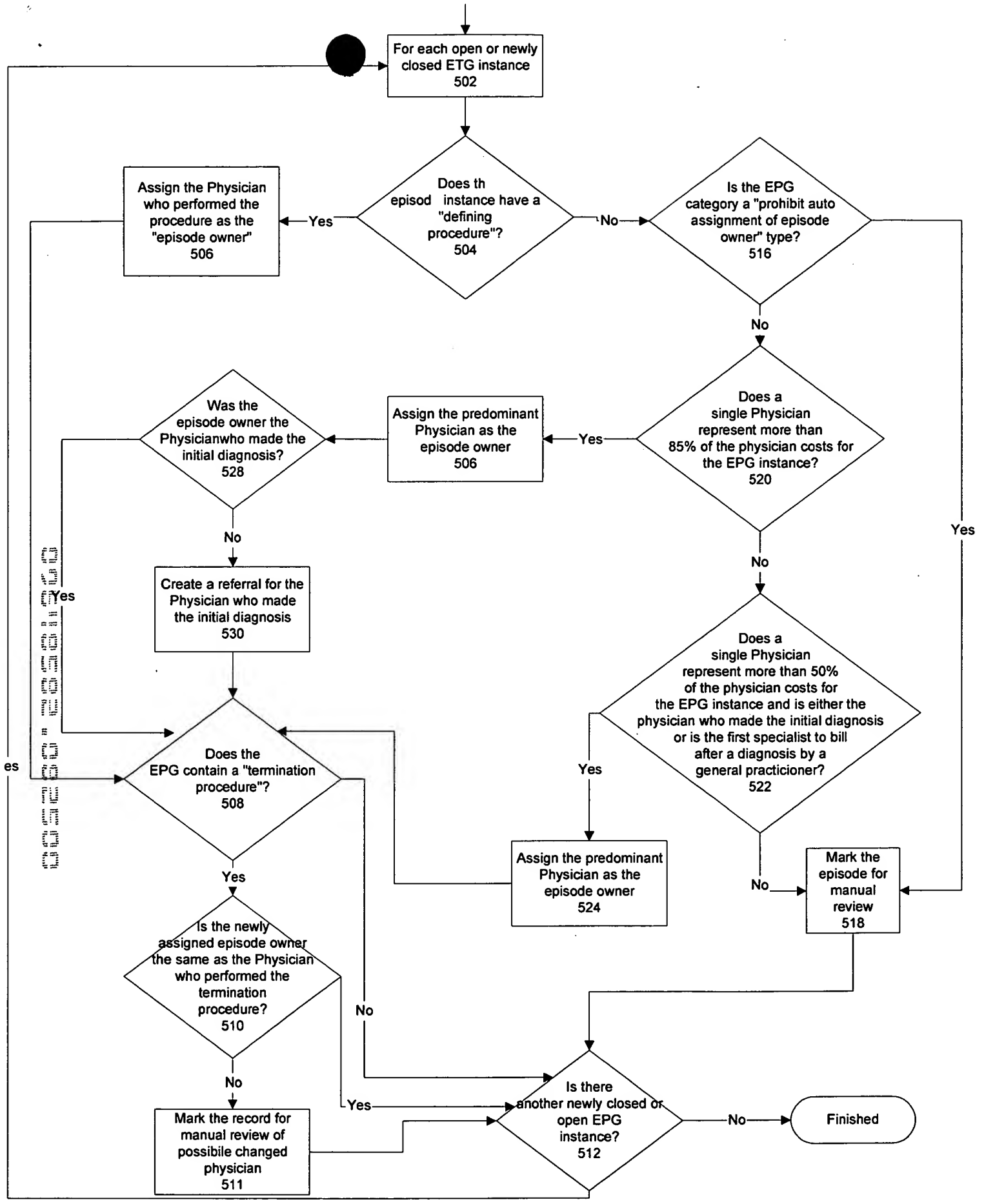
For each open or newly closed ETG instance 502
Does th episod instance have a "defining procedure"? 504
Yes
Assign the Physician who performed the procedure as the "episode owner" 506
No
Is the EPG category a "prohibit auto assignment of episode owner" type? 516
Yes
No
Does a single Physician represent more than 85% of the physician costs for the EPG instance? 520
Yes
Assign the predominant Physician as the episode owner 506
Was the episode owner the Physicianwho made the initial diagnosis? 528
No
Create a referral for the Physician who made the initial diagnosis 530
Yes
No
Does a single Physician represent more than 50% of the physician costs for the EPG instance and is either the physician who made the initial diagnosis or is the first specialist to bill after a diagnosis by a general practicioner? 522
Yes
Assign the predominant Physician as the episode owner 524
No
Mark the episode for manual review 518
Does the EPG contain a "termination procedure"? 508
Yes
Is the newly assigned episode owner the same as the Physician who performed the termination procedure? 510
No
Mark the record for manual review of possibile changed physician 511
Yes
No
Is there another newly closed or open EPG instance? 512
No
Finished
Yes

Figure 9A-1

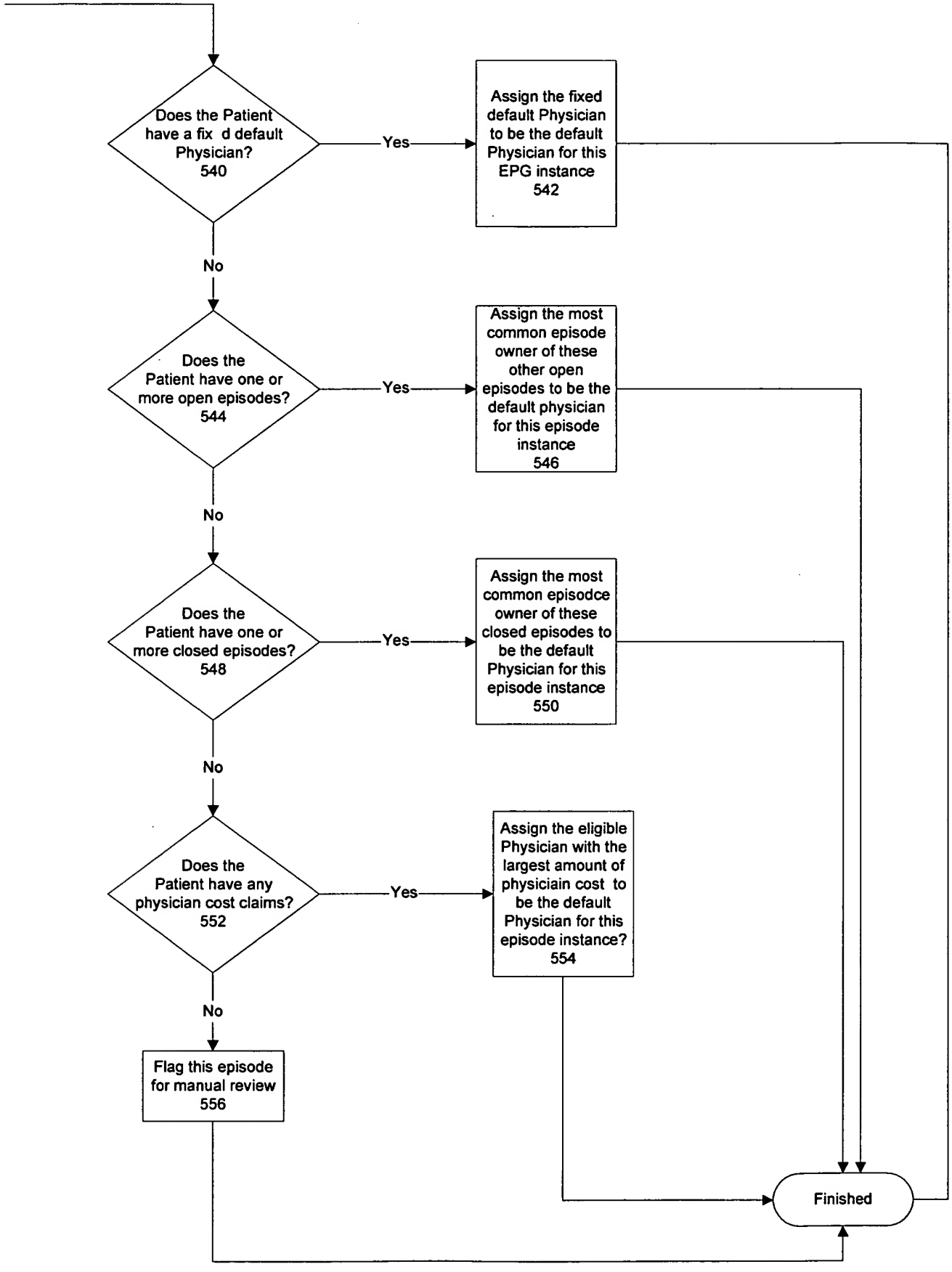
Does the Patient have a fix d default Physician? 540
Yes
Assign the fixed default Physician to be the default Physician for this EPG instance 542
No
Does the Patient have one or more open episodes? 544
Yes
Assign the most common episode owner of these other open episodes to be the default physician for this episode instance 546
No
Does the Patient have one or more closed episodes? 548
Yes
Assign the most common episodce owner of these closed episodes to be the default Physician for this episode instance 550
No
Does the Patient have any physician cost claims? 552
Yes
Assign the eligible Physician with the largest amount of physiciain cost to be the default Physician for this episode instance? 554
No
Flag this episode for manual review 556
Finished

Figure 9A-2

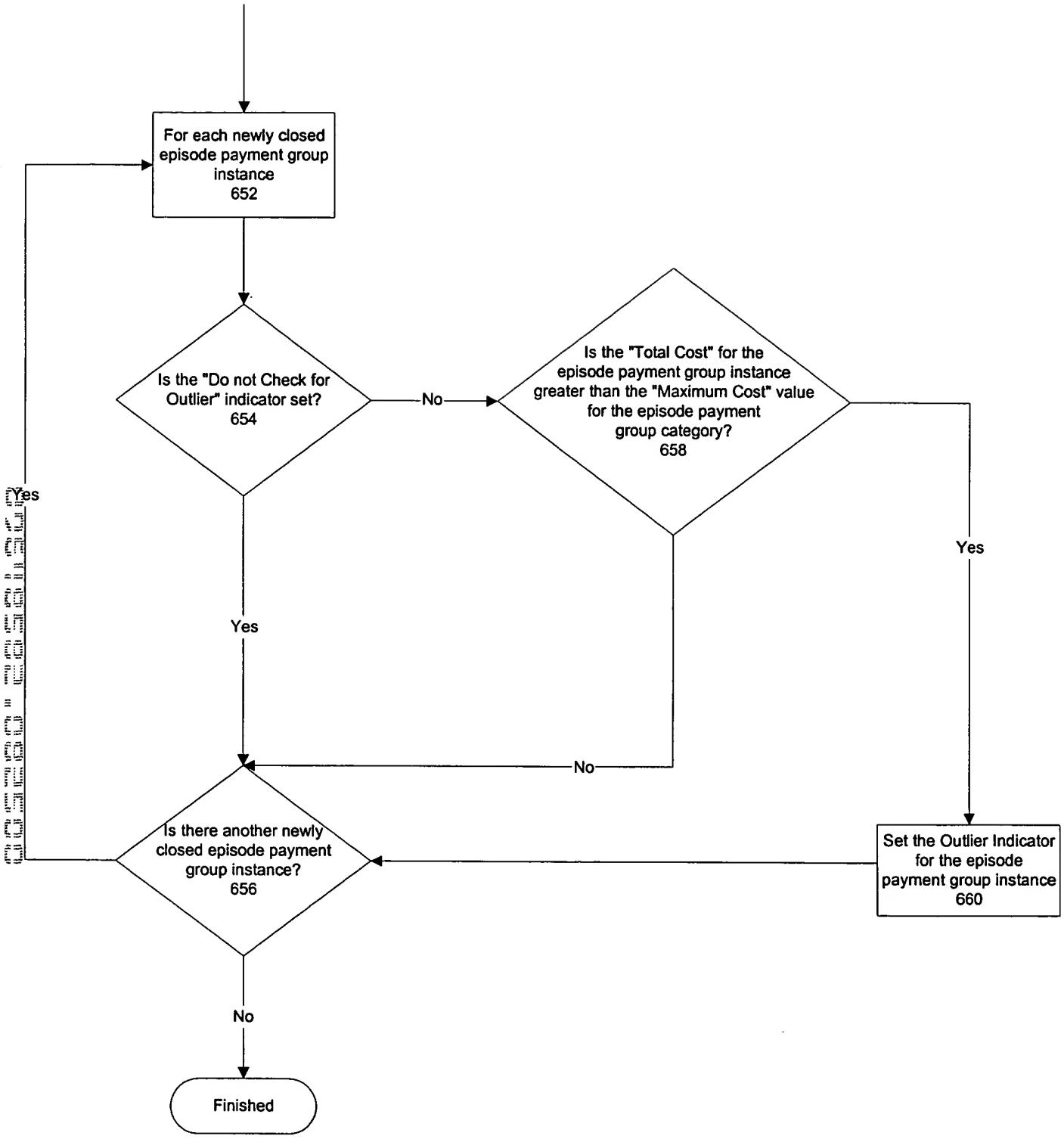
For each newly closed episode payment group instance 652
Is the "Do not Check for Outlier" indicator set? 654
No
Is the "Total Cost" for the episode payment group instance greater than the "Maximum Cost" value for the episode payment group category? 658
Yes
Yes
Yes
No
Is there another newly closed episode payment group instance? 656
Set the Outlier Indicator for the episode payment group instance 660
No
Finished

Figure 10

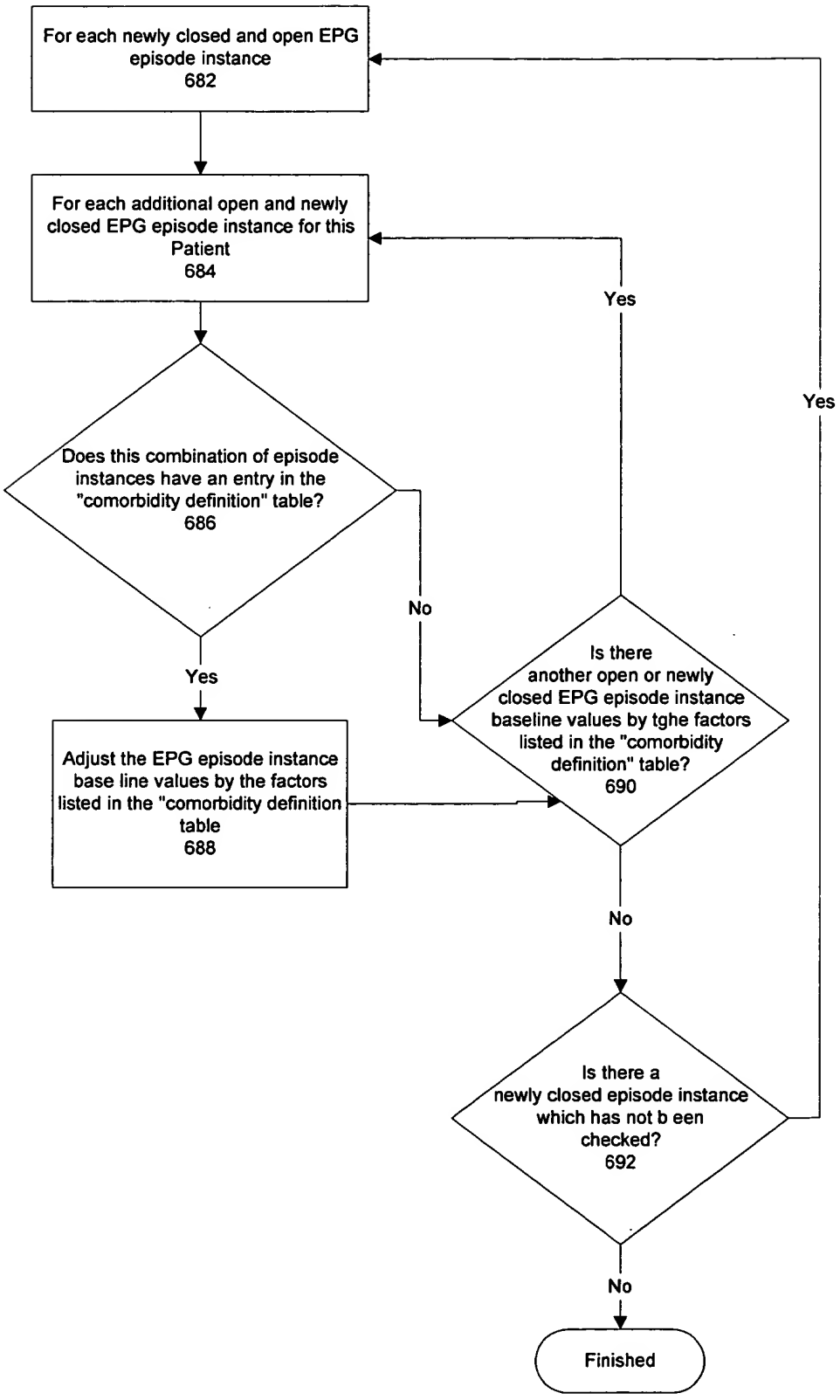
For each newly closed and open EPG episode instance
682
For each additional open and newly closed EPG episode instance for this Patient
684
Does this combination of episode instances have an entry in the "comorbidity definition" table?
686
Yes
No
Adjust the EPG episode instance base line values by the factors listed in the "comorbidity definition table
688
Is there another open or newly closed EPG episode instance baseline values by tghe factors listed in the "comorbidity definition" table?
690
Yes
No
Is there a newly closed episode instance which has not b een checked?
692
Yes
No
Finished

Figure 11

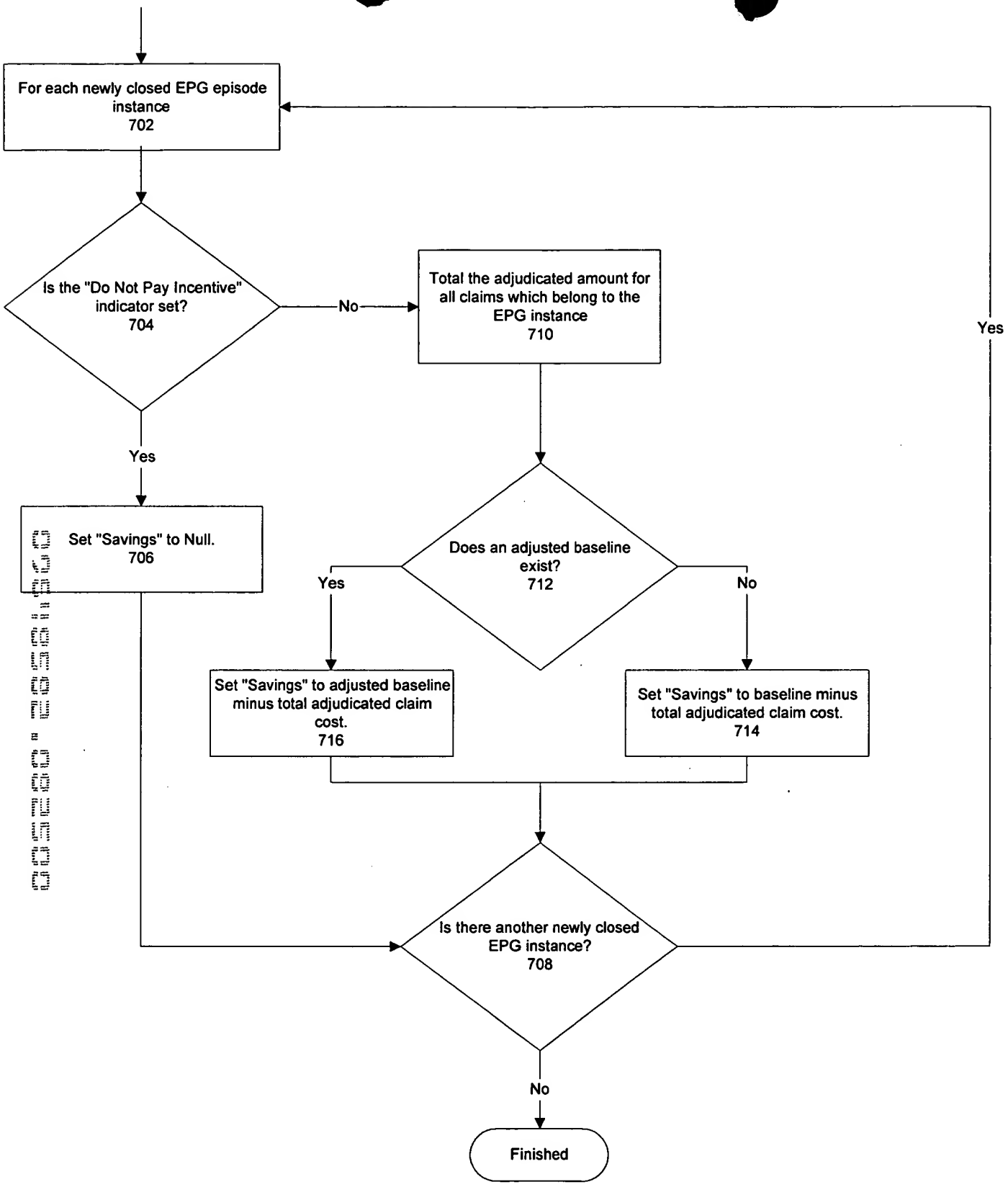
For each newly closed EPG episode instance
702
Is the "Do Not Pay Incentive" indicator set?
704
No
Yes
Total the adjudicated amount for all claims which belong to the EPG instance
710
Set "Savings" to Null.
706
Does an adjusted baseline exist?
712
Yes
No
Set "Savings" to adjusted baseline minus total adjudicated claim cost.
716
Set "Savings" to baseline minus total adjudicated claim cost.
714
Is there another newly closed EPG instance?
708
Yes
No
Finished

Figure 12

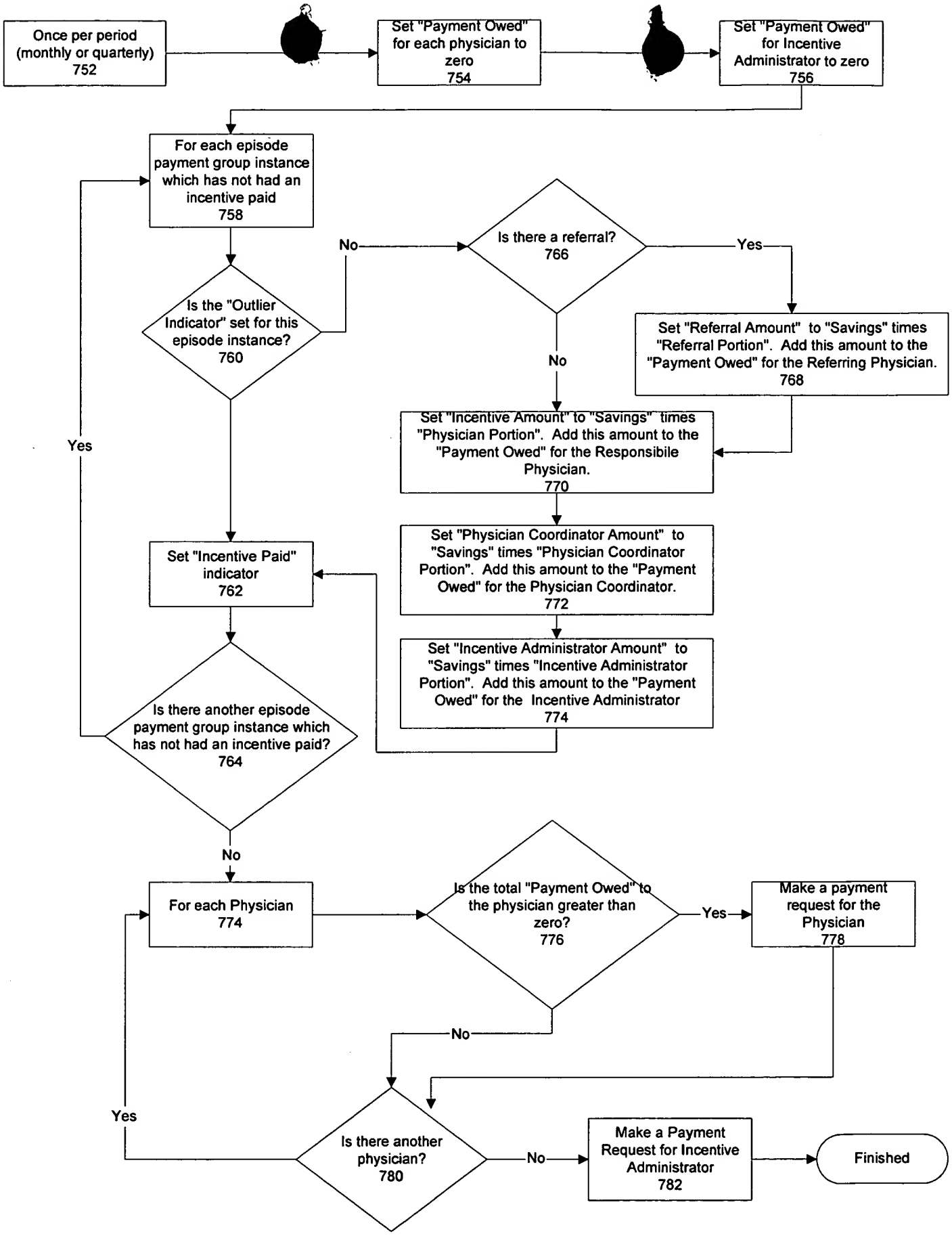
Once per period (monthly or quarterly) 752
Set "Payment Owed" for each physician to zero 754
Set "Payment Owed" for Incentive Administrator to zero 756
For each episode payment group instance which has not had an incentive paid 758
Is there a referral? 766
No
Yes
Is the "Outlier Indicator" set for this episode instance? 760
Set "Referral Amount" to "Savings" times "Referral Portion". Add this amount to the "Payment Owed" for the Referring Physician. 768
No
Yes
Set "Incentive Amount" to "Savings" times "Physician Portion". Add this amount to the "Payment Owed" for the Responsibile Physician. 770
Set "Physician Coordinator Amount" to "Savings" times "Physician Coordinator Portion". Add this amount to the "Payment Owed" for the Physician Coordinator. 772
Set "Incentive Paid" indicator 762
Set "Incentive Administrator Amount" to "Savings" times "Incentive Administrator Portion". Add this amount to the "Payment Owed" for the Incentive Administrator 774
Is there another episode payment group instance which has not had an incentive paid? 764
Yes
No
For each Physician 774
Is the total "Payment Owed" to the physician greater than zero? 776
Yes
Make a payment request for the Physician 778
No
Yes
Is there another physician? 780
No
Make a Payment Request for Incentive Administrator 782
Finished

Figure 13